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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,592	09/11/2007	Michael Ian Ferguson	B-6167 623847-3	3516
29690 7590 01/14/2011 CALIFORNIA INSTITUTE OF TECHNOLOGY 1200 E.CALIFORNIA BLVD. M/C 201-85 PASADENA, CA 91125				
EXAMINER				
KERVEROS, JAMES C				
ART UNIT		PAPER NUMBER		
2117				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/584,592

Applicant(s)

FERGUSON, MICHAEL IAN

Examiner

JAMES C. KERVEROS

Art Unit

2117

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 14-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group III (Claims 11-13) in the reply filed on April 27, 2010 is acknowledged.

Claims 1-10 and 14-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention, there being no allowable generic or linking claim.

Drawings

The drawings are objected to because in Figs. 1-16 the descriptive text is not legible due the small size of the fonts. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the

printer is limited. The Actual Word Count of the abstract is 200 words. The form and legal phraseology often used in patent claims, such as "comprises" should be avoided. Correction is required. See MPEP § 608.01(b).

The paragraph in the Cross Reference to Related Applications should be updated to include the related US Patent Application Serial Number and filing date corresponding to the title "Methods of Camouflaging the Functions of Electronic Circuits".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitation "representing small manufacturing tolerance related-differences.....as a plurality of multi-bit numbers", which renders the claims indefinite, because the terms "representing" and "as a" are indefinite terms, which fail to define the relation between "related-differences" and "multi-bit numbers".

The terms "particular item" "thereafter" "last mentioned", recited in claim 11, are indefinite terms, which render the claims indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Cho et al. (US Patent No. 5,638,381) ISSUED: June 10, 1997.

Regarding Claims 11-13, Cho an apparatus and method for deriving correspondence between storage elements of a first circuit model and storage elements of a second circuit model, as illustrated in Fig. 2, comprising:

Step 102 receiving the first circuit model, including a plurality of inputs, a plurality of outputs, a plurality of storage elements, and plurality of logic functions.

Step 104 receiving a second circuit model, including a plurality of inputs, a plurality of outputs, a plurality of storage elements, and plurality of logic functions.

Step 106 receiving input correspondences between the plurality of inputs of the first circuit model and the plurality of inputs of the second circuit model.

Step 108 receiving output correspondences between the plurality of outputs of the first circuit model and the plurality of outputs of the second circuit model.

Step 110, establishing a signature for at least some of the plurality of storage elements of the first circuit model.

Step 112, establishing a signature for at least some of the plurality of storage elements of the second circuit model.

Step 114, comparing the signatures of the storage elements of the first circuit model to the signatures of the storage elements of the second circuit model.

Step 116, determining the correspondences between the storage elements of the first circuit model and the storage elements of the second circuit model. A favorable comparison occurs when a single signature of a storage element of the first circuit model equals a single signature of a storage element of the second circuit model.

Step 118, if each of the storage elements of the first circuit model has been determined to correspond to exactly one of the storage elements of the second circuit model, the method is done and stops. However, if not, the method returns to step 110 wherein further correspondences are determined. In accordance with the steps of the present invention, the storage elements of a first circuit model may be directly related to the storage elements of a second circuit model. Once the storage elements have been related, the circuit models may be further verified.

Thus, the method of present invention provides a correspondence between the storage elements of a first circuit model and storage elements of a second circuit model. With such correspondences determined, the validity of the circuit models may be checked.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C. KERVEROS whose telephone number is (571) 272-3824. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES C KERVEROS/
Primary Examiner, Art Unit 2117

Date: 13 January 2011
Office Action: Non-Final Rejection

U.S. Patent & Trademark Office
Alexandria, VA 22314.
Tel: (571) 272-3824, Fax: (571) 273-3824
Email: james.kerveros@uspto.gov